

March 1, 2002

**Via Electronic Filing**

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

**Re: Mobile Satellite Ventures Subsidiary LLC  
Ex Parte Presentation  
IB Docket No. 01-185**

Dear Mr. Caton:

On February 27, 2002, Carson Agnew, President; Peter Karabinis, Chief Technical Officer; and Lon Levin, Vice President and Regulatory Counsel; all of Mobile Satellite Ventures Subsidiary LLC ("MSV"), along with Bruce Jacobs and David Konczal of Shaw Pittman LLP, counsel to MSV, met with Robert Pepper, Evan Kwerel, and John Williams of the Office of Plans and Policy.

MSV discussed its proposal to deploy an ancillary terrestrial component ("ATC") to supplement its mobile satellite service ("MSS") in the L-band, as described in the attached presentation materials. MSV explained that independent terrestrial operators cannot exist in the L-band without causing debilitating interference to current and future satellite operations in the band. Terrestrial operations in the L-band can occur only if the satellite and terrestrial operations are integrated under the control of one entity. MSV further explained that the international coordination process and priority and preemptive access requirements in the L-band for aeronautical and maritime safety services preclude independent terrestrial operations.

Please direct any questions regarding this matter to the undersigned.

Very truly yours,



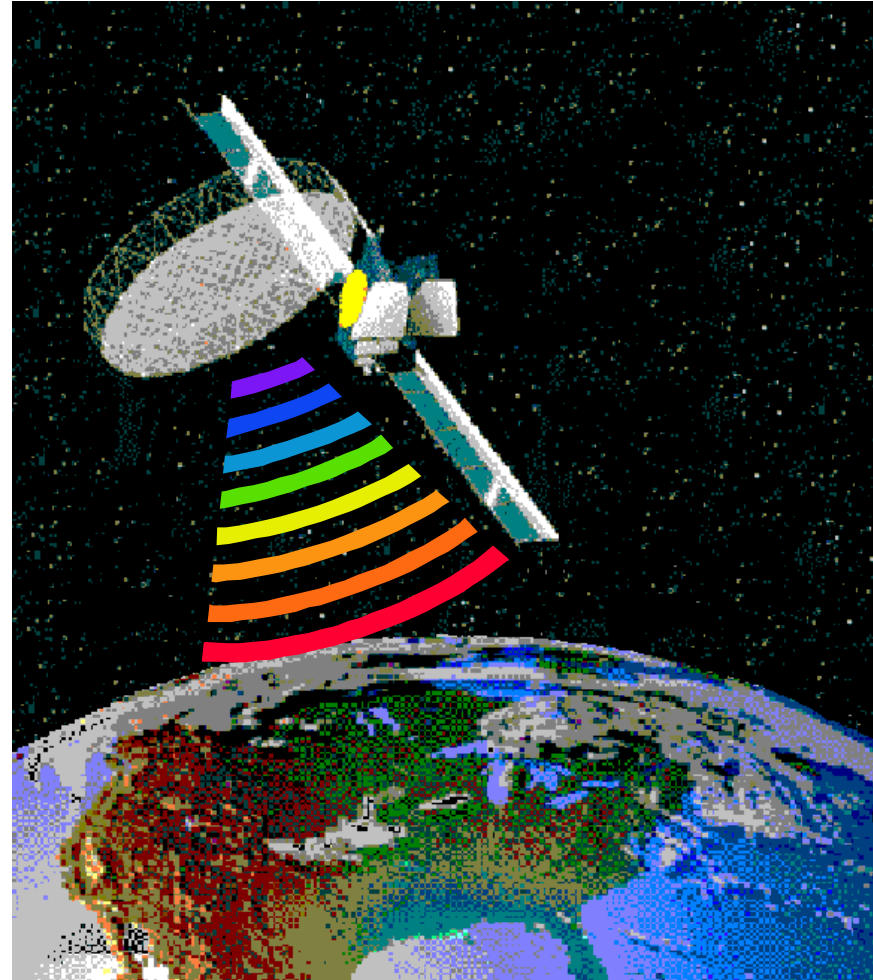
David S. Konczal

cc: Robert Pepper  
Evan Kwerel  
John Williams

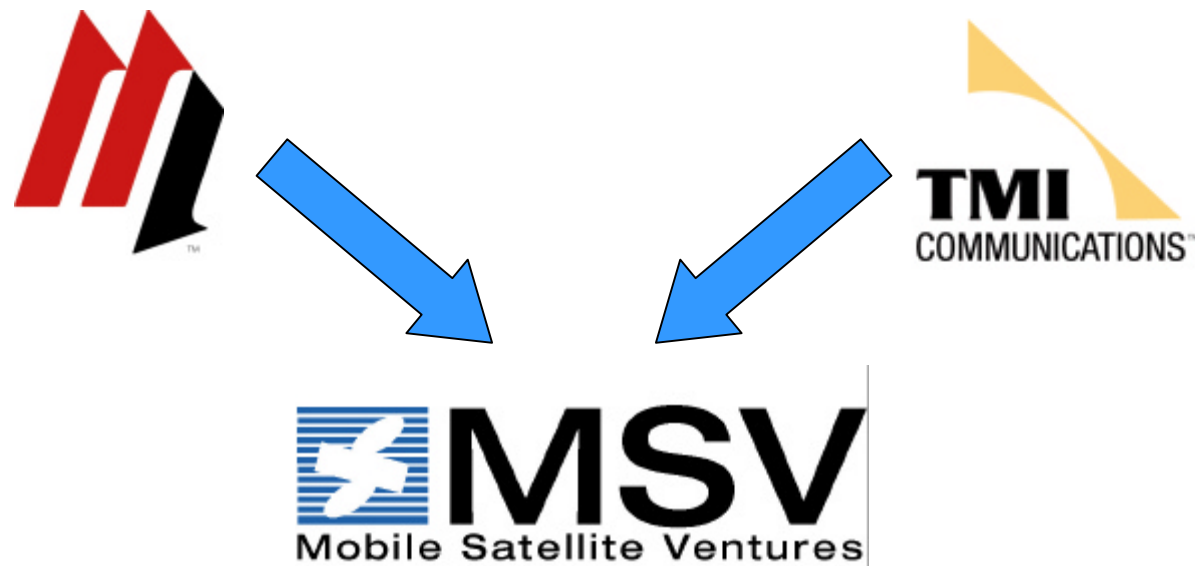
# **MSV's Next Generation Satellite System: The Need for Spectrum Flexibility**

Presented to the Federal Communications Commission  
Office of Plans and Policy  
February 27, 2002

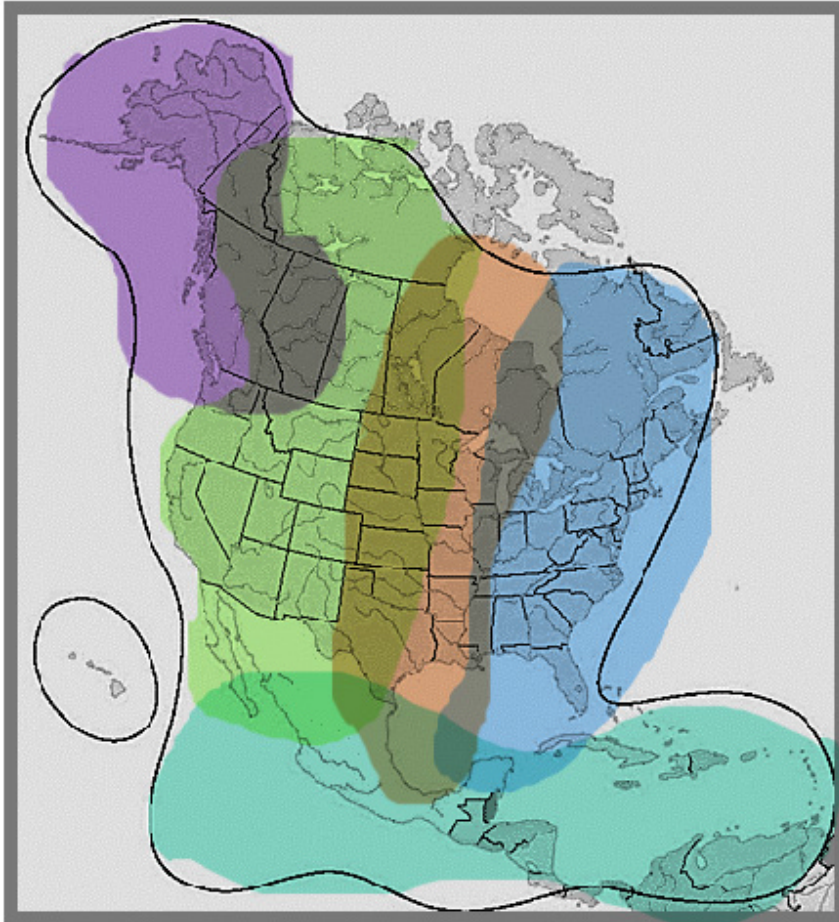
# Overview of Mobile Satellite Ventures



# MSV Background



# MSV's Current System



- Two satellites and ground stations provide backup
- North American coverage
  - Each satellite uses six separate spot beams to access small antennas
- Points of presence in USA and Canada
- Full spectrum of services:

# Some Current MSV Customers

## Public Service

- American Red Cross
- Department of Transportation
- FAA
- FEMA
- Federal Highway Administration
- HHS
- Hawaii DOD
- NYC Fire Department
- Missouri Highway Patrol
- USDA
- US Fish and Wildlife Service

## Commercial

- AT&T Wireless
- Boeing
- BP/Amoco
- CBS
- Colonial Pipeline
- El Paso Energy
- Florida Power & Light
- Northern Natural Gas
- Rio Grande Electric
- Southwest Power Pool
- Vistar Datacom
- Williams Companies

# Lessons Learned

## *Problem*

- Satellite users experience poor coverage in major urban areas and inside buildings.
- Capacity is low compared to terrestrial systems with similar coverage.
- Terminals are too expensive compared to terrestrial for all but a few users.

## *Cause*

- Satellite signals are easily blocked by trees, buildings and the like.
- Frequency re-use is low compared to terrestrial systems, and spectrum is limited.
- Market opportunity is too small to bring costs down.

# Addressing These Problems -- I

## “Multi-mode” Networks

- “Multi-mode” user terminals try one network (e.g., terrestrial) first, and try another network (e.g., satellite) if the first network is unavailable.
- Example: Motient’s MobileMAX<sub>2</sub>
  - 80% of traffic travels over the terrestrial network.
  - However, total traffic is five times more than satellite only.

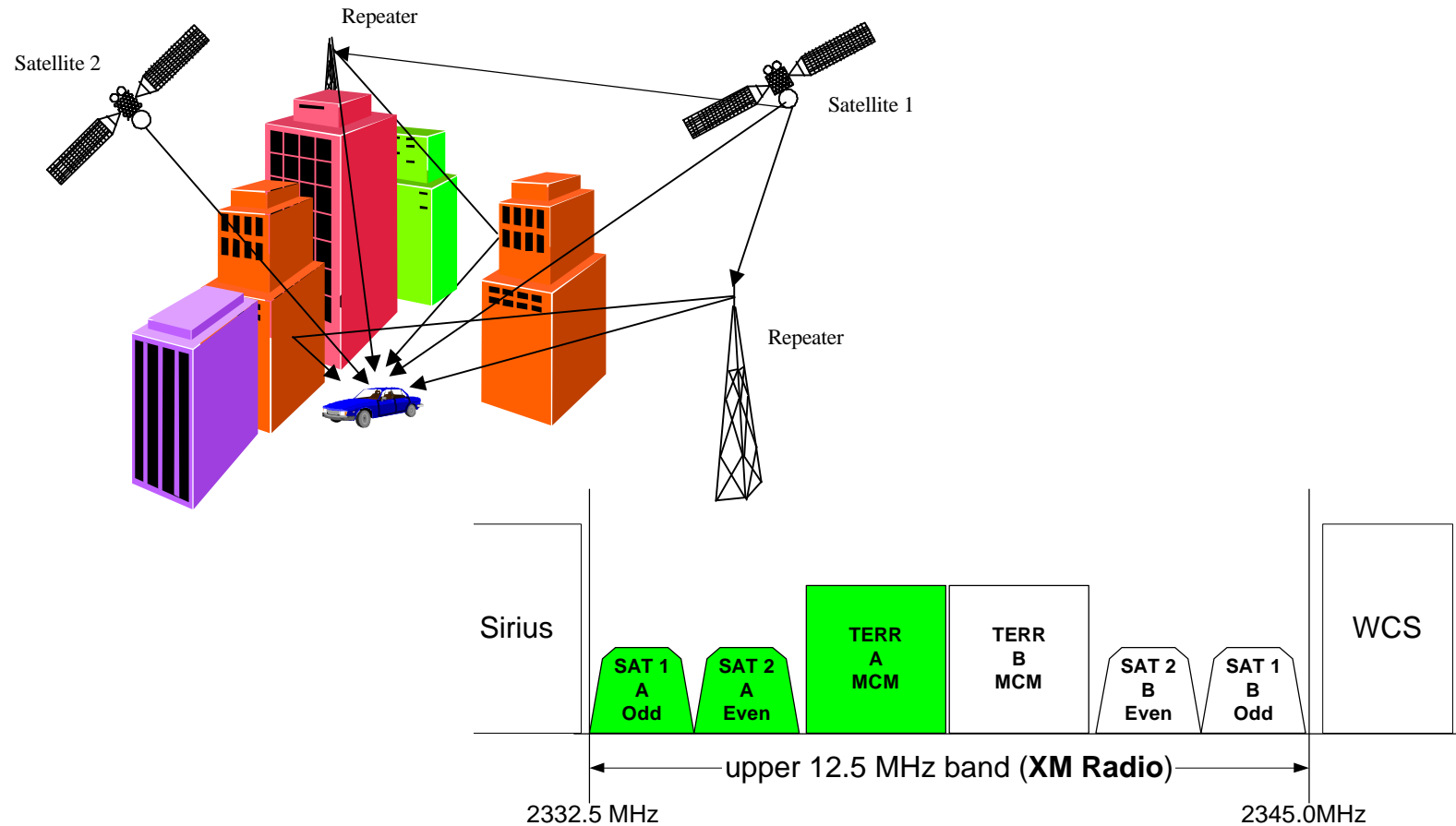


MobileMAX<sub>2</sub>

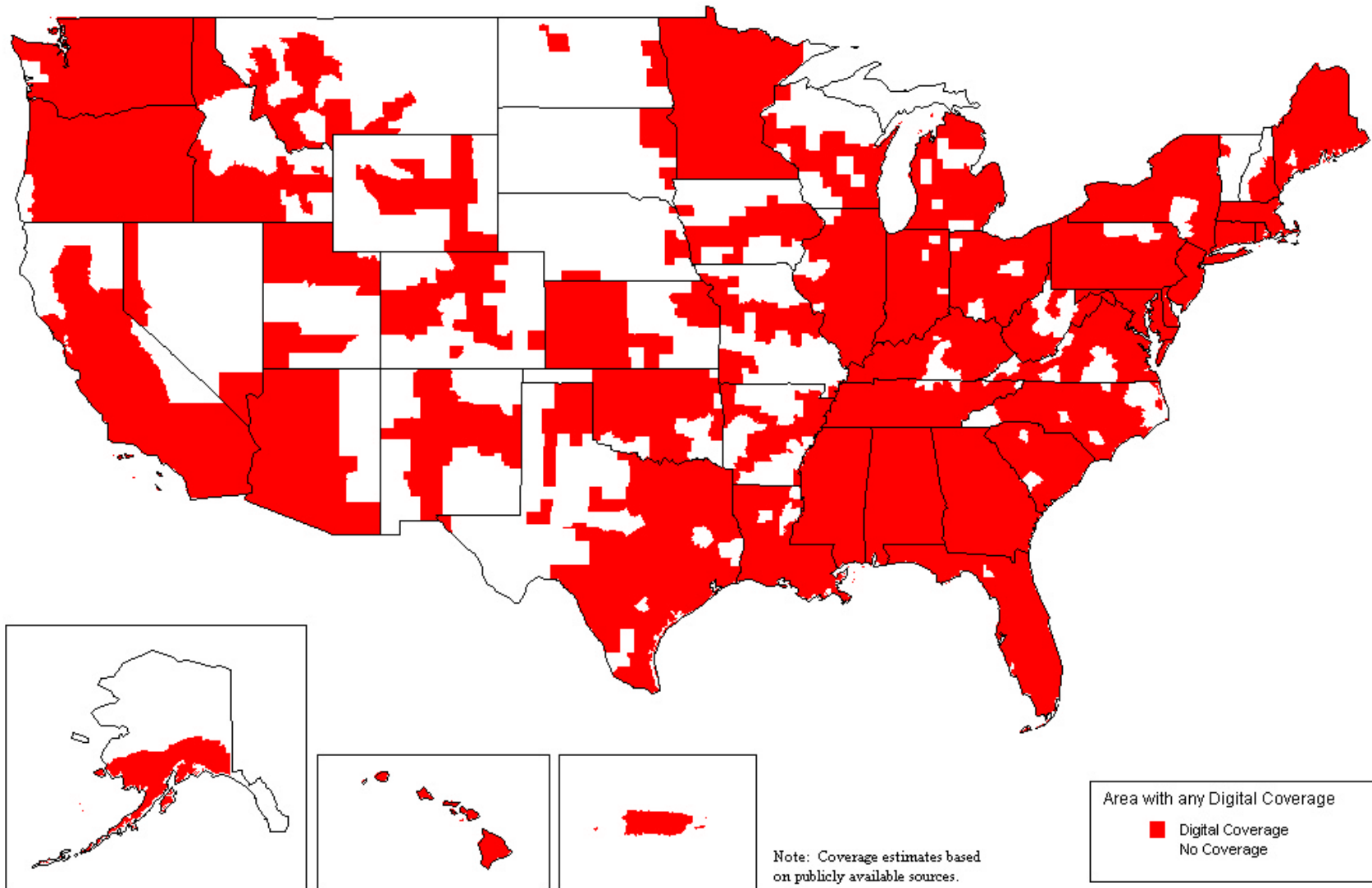


# Addressing These Problems - II

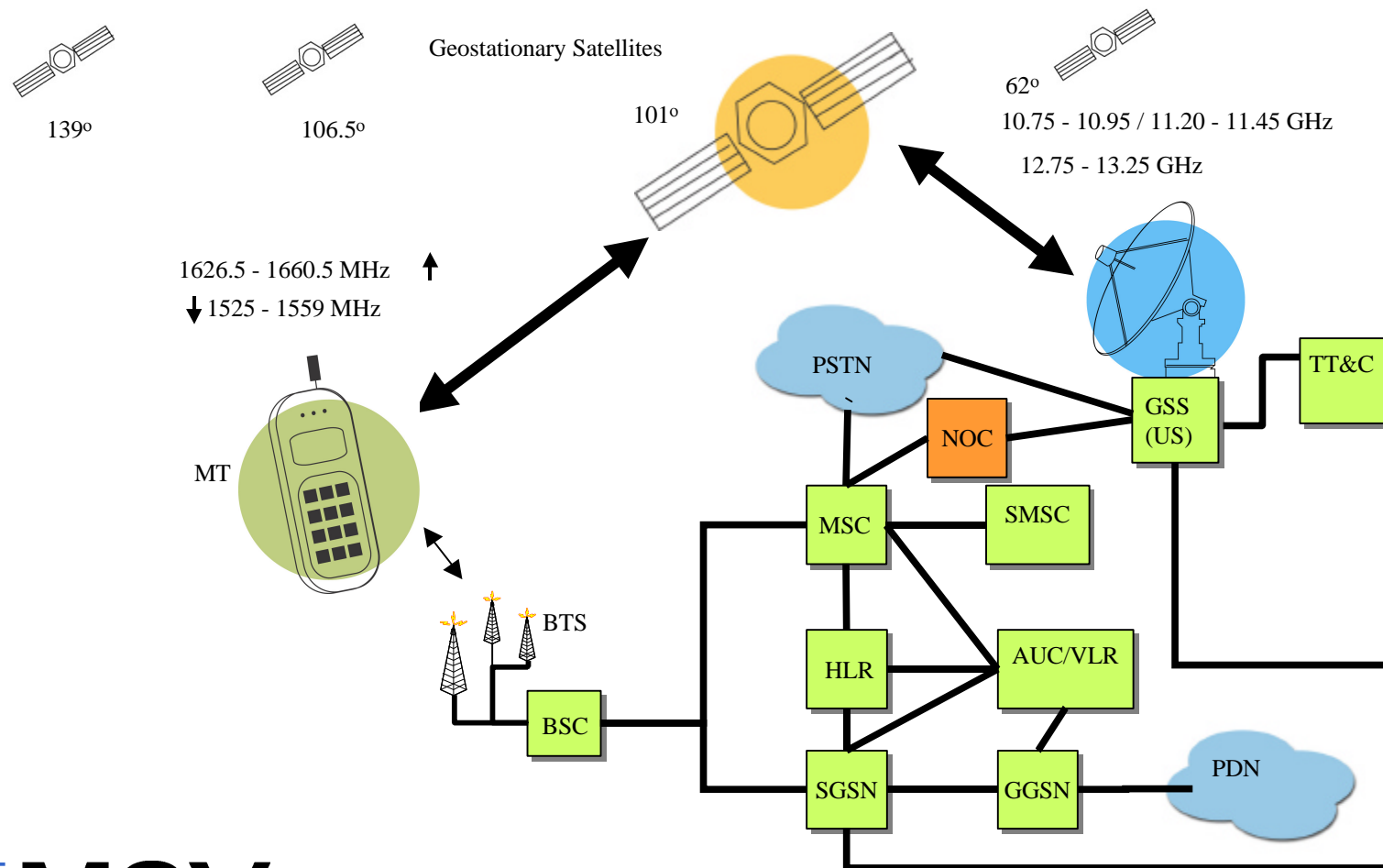
## XM Satellite Radio Architecture



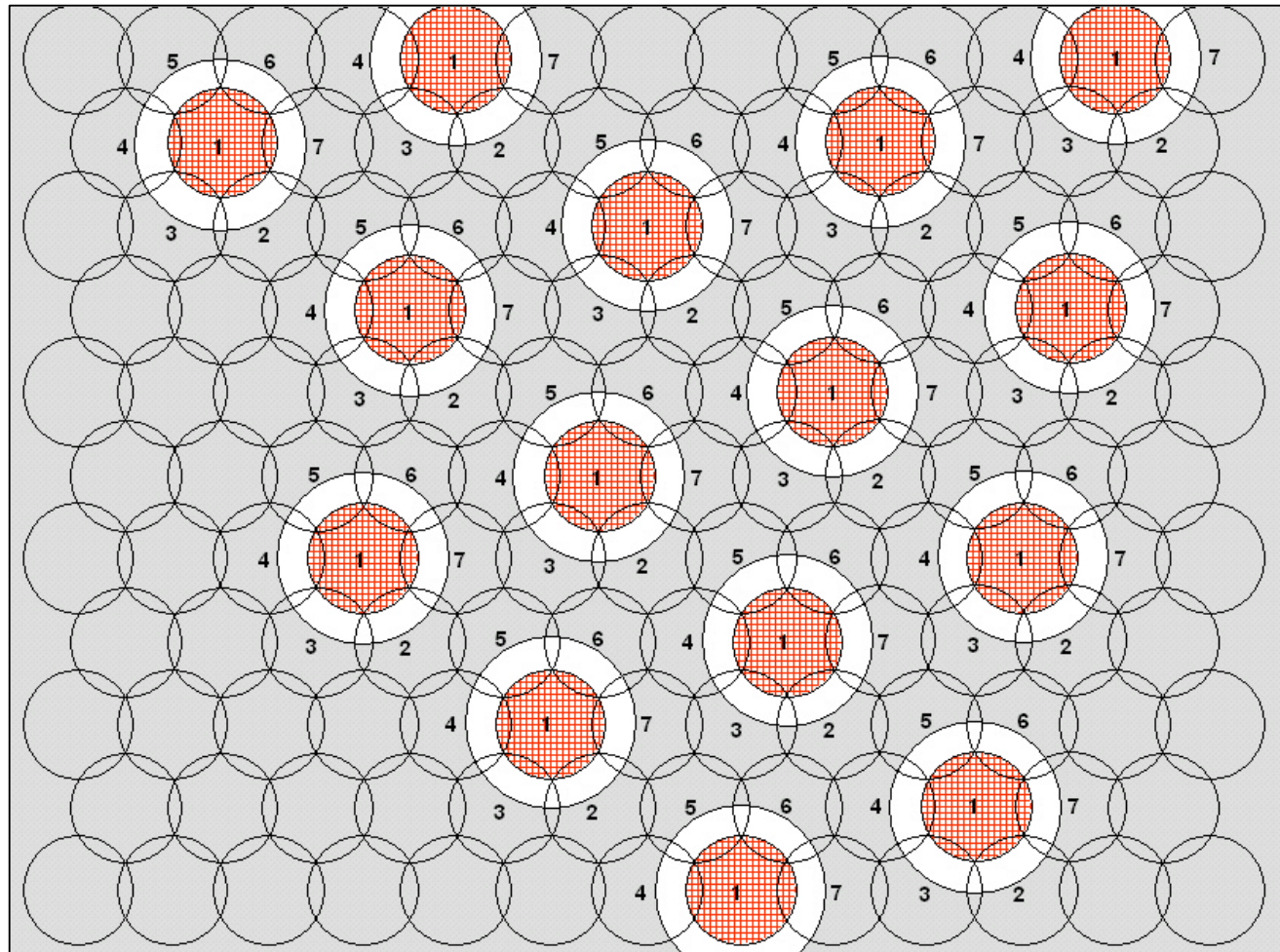
# Counties With Any Digital Coverage



# MSV's Integrated Satellite-Ancillary Network (Standard GSM Architecture)



# MSV's Satellite/Terrestrial Reuse Plan (illustrative)



# Frequency Agility (illustrative)

